ANTIBACTERIAL ACTIVITY OF *Caulerpa* sp. AT BLUE LAGOON, PORT DICKSON, NEGERI SEMBILAN

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ABSTRACT

ANTIBACTERIAL ACTIVITY OF *Caulerpa* sp. AT BLUE LAGOON, PORT DICKSON, NEGERI SEMBILAN

The aim of this study is to determine the antibacterial activity of *Caulerpa* sp. collected at Blue Lagoon, Port Dickson, Negeri Sembilan on Gram-positive bacteria (*Bacillus subtilis* and *Staphylococcus* sp.) and Gram-negative bacteria (*Escherichia coli* and *Pseudomonas aeruginosa*). *Caulerpa racemosa* identified at Blue Lagoon was tested for the antibacterial activity against selected bacteria strains. Two types of extraction (aqueous and ethanol) on disc diffusion method was used to evaluate the antibacterial activity of *C. racemosa*. The results of antibacterial activity were expressed as a zone of inhibition (in millimetre) and minimum inhibitory concentrations (MIC). The selected bacteria strains were tested with five different concentrations (2, 5, 10, 15, and 20 mg/ml) of the extracts. All the ethanol and aqueous extracts concentrations of *C. racemosa* did not exhibited any antibacterial activity against all bacteria strains, except against *E. coli* (Gram-negative bacteria) on aqueous extracts. The *E. coli* showed very low sensitivity towards all aqueous extracts concentrations of *C. racemosa.* The statistical analysis of ANOVA showed that both ethanol and aqueous extract did not have significant differences against the bacterial strains used ($p > 0.05$).